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#### REMARKS

Applicants have carefully reviewed the Office Action dated December 9, 2005. Claims 1-47 are pending in the application. Applicants have amended Claims 1, 6, and 31. Claims 2-5, 7-31, and 32-47 have been maintained in their original form. Reconsideration and favorable action is respectfully requested.

### Rejections under 35 U.S.C. § 103

Independent claims 1 and 31 were rejected under 35 U.S.C. § 103 as being unpatentable over U.S. Patent No. 6,310,554 to Carrell ("Carrell") in view of U.S. Patent No. 4,812,828 to Kennedy et al. ("Kennedy"). Applicant submits that the references as cited by the Examiner do not provide a prima facie case of obviousness for the claims as amended for the reasons explained below.

# References Do Not combine to Teach the Claimed Subject Matter

Applicant submits that the Carrell and Kenedy cannot be combined to reject amended claims 1 and 32 under 35 U.S.C. § 103. When determining obviousness, all limitations of the claims must be evaluated. Applicant submits that all limitations of the amended claims are not taught by the combination of Carrell and Kennedy.

Claim 1, as amended, recites in part, "an electromagnetic signal receiver that receives digital time signals and electromagnetic signals produced by lightning" and "a processor communicably connected to the electromagnetic signal receiver that processes the electromagnetic signals produced by lightning to determine when an atmospheric event has occurred..." (emphasis added).

Similarly, claim 31, as amended, recites in part, "receiving electromagnetic signals; discriminating man-made electromagnetic signals from atmospheric event electromagnetic signals caused by lightning; and indicating an atmospheric event when atmospheric event electromagnetic

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signals are received," (emphasis added).

Neither Carrell or Kennedy, alone or in combination, teaches each of the elements recited in the amended claims above. According to the Official Action, Carrell fails to disclose an electromagnetic signal. The claims have been amended to recite the use of electromagnetic signals caused or produced by lightning. This is in contrast with Kennedy which teaches that "[t]he alarm initiate circuitry includes a time delay/integrator is highly efficient in distinguishing between continuous amplitude modulated signal associated with a tornado and discontinuous or bust electromagnetic energy associated with lighting. If the alarm initiate circuitry detects a tornado, it supplies an alarm initiate signal to an alarm driver 26," col. 3, lines 37-44, (emphasis added). Therefore, the 35 U.S.C. § 103 rejection of claims 1 and 31 should be withdrawn.

### The References Teach Away from the Claimed Subject Matter

References that teach away from the claimed invention may not be used in combination with other references show a prima facie case of obviousness. Applicant understands the Examiner's position to be that Carrell discloses all of the elements of the claims (before they were amended) except for an electromagnetic signal. Kennedy was then submitted as a reference to cure this deficiency. Kennedy states that "[t]he alarm initiate circuitry includes a time delay/integrator is highly efficient in distinguishing between continuous amplitude modulated signal associated with a tornado and discontinuous or bust electromagnetic energy associated with lighting. If the alarm initiate circuitry detects a tornado, it supplies an alarm initiate signal to an alarm driver 26," col. 3, lines 37-44. Each of the present claims requires the use of electromagnetic signals caused by lightning. Therefore Kennedy is teaching away from the claims of the present application, as amended, and may not be combined with Carrell to provide a prima facie case of obviousness. For this reason, the 35 U.S.C. § 103 rejection of claims 1 and 31 should be withdrawn.

#### The Combination of References is Improper

The MPEP states that "[t]he mere fact that references can be combined or modified does not

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render the resultant combination obvious unless the prior art also suggests the desirability of the combination," (§ 2143.01). Obviousness cannot be established by combining the teachings of the prior art to produce the claimed invention, absent some teaching, suggestion or incentive supporting the combination. In the present case, nothing has been shown in the references themselves that would suggest the combination of the references to produce the subject matter of the amended claims. For this reason, the 35 U.S.C. § 103 rejection of claims 1 and 31 should be withdrawn.

## Rejection of the Dependent Claims

For the reasons discussed above, claims 1 and 31 should now be in condition to overcome all rejections and should be in condition for allowance. Dependent claim 6 was amendment to properly reference amended claim 1. Claims 2-30 and 32-47 depend from and further limit the independent claims and should therefore also be in condition for allowance.

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#### Conclusion

Applicants have now made an earnest attempt in order to place this case in condition for allowance. For the reasons stated above, Applicants respectfully request full allowance of the claims as amended. Please charge any additional fees or deficiencies in fees or credit any overpayment to Deposit Account No. 20-0780/LGRE-26,460 of HOWISON & ARNOTT, L.L.P.

> Respectfully submitted, HOWISON & ARNOTT, L.L.P. Attorneys for Applicants

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